

Emerging Issues in Natural Resources

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Introduction:

There are rapidly changing environmental, political, and social conditions in urbanizing areas which result in new challenges and opportunities. In this InterfaceSouth Update we explore some of these emerging issues such as ecosystem service valuation, ecosystem restoration, climate change, and many more. These issues involve human influences that may increase pressure on natural environments at multiple scales.

Research: Appropriate Experimental Ecosystem Warming Methods by Ecosystem, Objective, and Practicality

Researchers from the USFS Southern Research Station and the University of Pennsylvania examined the effects of sustained heating on the ecosystems of the world to better understand upcoming temperature changes on both large and small spatial scales. An extensive literature review was performed and all ecosystem warming study sites were compiled into a master list. The goals of this study were to identify: (1) the most generally applicable, inexpensive and effective heating methods; and (2) areas of the world that are understudied or have been studied using only limited warming methods. They found that the most generally applicable method, and the one that is most true to climate change predictions, is IR heating lamp installation. This study also discusses ecosystem warming method limitations and recommendations.

For more information on this research visit:

www.forestthreats.org/publications/sgcp/steve-mcnultyAppropriate_experimental_ecosystem_warming_methods_by_ecosystem_objective_and_practicality.pdf



Upcoming Event: Emerging Issues Along Urban-Rural Interfaces 3 Conference

This conference seeks to bring together researchers, practitioners, and policy makers to share current research results and to identify knowledge gaps regarding the interaction between urbanization, land-use change, and natural resources. In particular, approaches that focus on integrating socioeconomic and ecological research will be highlighted. The conference is sponsored by Auburn University's Center for Forest Sustainability and the USDA Forest Service's InterfaceSouth and will take place April 11-14, 2010, in Atlanta, Georgia.

For more information about this event visit: www.emergingissues.interfacesouth.org/

For more upcoming events visit InterfaceSouth at: www.interfacesouth.org/resources/events.html

In the News: Longleaf Pines: New Weapon in Battle Against Climate Change

The National Wildlife Federation recently released the report titled, "Standing Tall: How Restoring the Longleaf Pine Can Help Prepare the Southeast for Global Warming," that promotes reforestation of longleaf pines as a smart strategy to deal with climate change. The Southeast is already the scene of ongoing longleaf pine restoration, some of it paid for by the American Recovery and Reinvestment Act, popularly known as stimulus funds. The U.S. Fish and Wildlife Service recently approved \$839,000 in stimulus funds for four longleaf pine restoration projects covering parts of South Carolina, Georgia, Florida, and Alabama. The new report highlights the latest scientific research on global warming effects in the Southeast and how it puts Southern forests at risk.

To read the full story visit: www.mnn.com/earth-matters/wilderness-resources/stories/longleaf-pines-new-weapon-in-battle-against-climate

For additional current news articles on WUI topics, visit InterfaceSouth at: www.interfacesouth.org/inthenews.html

Literature: Forest Ecosystem Services and Development Pressures

Ecosystem services from forests on private lands are often under-produced because landowners deal with the costs of restoring, preserving, and managing their lands to produce ecological services that benefit their community or larger society. A variety of federal and state programs have applied a combination of regulations, extension, and incentives to encourage private landowners to implement forest management, conservation, and restoration activities. The increase of populations implies a



growing demand for both marketed and non-market benefits of forests such as both timber and other ecosystem services. This paper explores general questions regarding the scarcity of ecosystem services and recently proposed market based programs for providing ecosystem services from private lands. The authors examine development pressures in the South and outline their likely implications for southern forests.

To view this literature visit: www.treesearch.fs.fed.us/pubs/29053

For more literature on WUI issues visit InterfaceSouth: www.interfacesouth.org/literature/

Website: Ecological Restoration

As runoff moves, it picks up and carries away natural and human-made pollutants, finally depositing them into lakes, rivers, wetlands, coastal waters, and even our underground sources of drinking water. Ecological restoration is a tool that can produce improvements in the quality of our water resources to support diverse, productive communities of plants and animals that provide significant ecological and social benefits. This website provides the document that focuses on restoration as it applies to stream quality.

To access this website visit: www.epa.gov/owow/nps/Ecology/

For more web links about interface issues visit: www.interfacesouth.org/resources/websites.html

Contact Us!

If you have any questions or comments please contact Annie Hermansen-Baez, ahermansen@fs.fed.us, 352-376-3271 or the project intern at swuintern@yahoo.com

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